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PATENT ABSTRACTS OF JAPAN

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(54) PICKING FEEDING DEVICE FOR CIGARETTE

(57)Abstract:

PROBLEM TO BE SOLVED: To reliably pick up cigarettes one by one from a heap of a number of cigarettes stacked with all made of uniform direction to some extent and feed picked up cigarettes to a tray.

SOLUTION: Cigarettes T on a cigarette roll feed tray 1 are irradiated with six laser slit beams by a laser projector 4. The cigarette T is illuminated by a first cigarette end illuminator 2a to illuminate the end part of a filter part. The cigarette T is photographed from an oblique direction to slit beams by a CCD camera 3a. Through processing of the image of a personal computer 100 for processing an image, a plurality of arcuate unit patterns by slit beams on the image are detected pertaining to cigarettes on a topmost stage. A position of the end part of the cigarette is detected. The position of the cigarette is detected in an end part position by a plurality of unit patterns. Data in a detecting position is transferred from the personal computer 100 for processing an image to a personal computer 200 for controlling a robot. An articulated robot 5 is controlled by the personal computer 200 for controlling a robot, the cigarettes T on the cigarette feed tray 1 are sucked by a hand part 54 and fed to a cigarette insertion tray 10.

